

TERRITORY OF AMERICAN SAMOA

40 CFR SUBPART DDD, SECTION 52.2820(c)

STATE IMPLEMENTATION (SIP) RULES

IN EFFECT AS OF JANUARY 1, 2005

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## GENERAL PROVISIONS

- 1.0 Definitions:
- 1.0.1 "Air pollutant" shall mean dust, mist, fumes, smoke, other particulate matter, vapor, gas, odorous substances, or any combination thereof.
- 1.0.2 "Air pollution" shall mean the presence in the outdoor atmosphere of one or more air pollutants in such quantities and duration as is or tends to be injurious to human health or welfare, animal or plant life, or property or interferes with the enjoyment of life or property.
- 1.0.3 "Chairman" shall mean the Chairman of the Environmental Quality Commission.
- 1.0.4 "Emission" shall mean the act of releasing or discharging air pollutants into the ambient air from any source.
- 1.0.5 "Existing source" shall mean any stationary source other than a new source.
- 1.0.6 "Fuel-burning equipment" shall mean any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat.
- 1.0.7 "Fugitive dust" shall mean solid airborne particulate matter emitted from any source other than through a stack.
- 1.0.8 "Modification" shall mean any physical change to or change in the method of operation of a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.
- 1.0.9 "New source" shall mean any stationary source, the construction or modification of which is commenced after publication of any applicable proposed regulations.
- 1.0.10 "Opacity" shall mean a state which renders material partially or wholly impervious to rays of light and causes obstruction of an observer's view.
- 1.0.11 "Open burning" shall mean the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an adequate stack or flare.
- 1.0.12 "Particulate matter" shall mean any material, except water in uncombined form, that is or has been airborne and exists as a liquid or a solid at standard conditions.
- 1.0.13 "Person" shall mean any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency,

political subdivision of this Territory, any other State or political subdivision or agency thereof or any legal successor, representative, agent, or agency of the foregoing.

1.0.14 "Ringelmann chart" shall mean the chart published and described in the U.S. Bureau of Mines Information Circular 8333.

1.0.15 "Soiling index" shall mean a measure of the soiling properties of suspended particles in air determined by drawing a measured volume of air through a known area of Whatman No. 4 filter paper for a measured period of time, expressed as COH's/1,000 linear feet, or equivalent.

1.0.16 "Source" shall mean any property, real or personal, which emits or may emit any air pollutant.

1.0.17 "Stack" shall mean any chimney, flue, conduit, or duct arranged to conduct emissions to the ambient air.

1.0.18 "Standard conditions" shall mean a dry gas temperature of 68° Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute (20 C, 760 mm Hg)

1.1 Approval of new sources; permit to operate.

1.1.1 Approval to construct:

(a) No person shall construct or cause the construction of any new source without first obtaining approval from the Chairman of the location and design of such new source.

(b) Application for approval to construct a new source shall be made by the owner or operator thereof on forms furnished by the Chairman.

(c) A separate application is required for each new source subject to rules and regulations.

(d) Each application shall be signed by the applicant, which signature shall constitute an agreement that the applicant will assume responsibility for the construction, or operation of the new source in accordance with applicable rules and regulations and will notify the Chairman in writing of the start up of operation of such source.

(e) Each application for approval to construct a new source shall be accompanied by siting information, plans, descriptions, specifications and drawings showing the design of the new source and the manner in which it will be operated and controlled.

(f) Any additional information, plans, specifications, evidence or documentation that the Chairman may require shall be furnished upon request.

1.1.2 Standards for granting approval to construct: No approval to construct a new source shall be granted unless the applicant shows to the satisfaction of the Chairman that:

(a) The new source will operate without causing a violation of applicable rules and regulations.

(b) The new source will not prevent or interfere with attainment or maintenance of any applicable ambient air quality standards.

1.1.3 Action on Applications:

(a) The Chairman shall act within 60 days on an application and shall notify the applicant in writing of his approval, conditional approval, or denial of the application.

(b) The Chairman shall set forth in any notice of denial his reasons for denial.

1.1.4 Conditional approval: The Chairman may impose any reasonable conditions upon an approval, including conditions requiring the new source to be provided with:

(a) Sampling ports of a size, number, and location as the Chairman may require,

(b) Safe access to each port,

(c) Instrumentation to monitor and record emission data, and

(d) Any other sampling and testing facilities.

1.1.5 Cancellation of approval: The Chairman may cancel an approval if the construction or modification is not begun within 2 years from the date of issuance, or if during the construction work is suspended for one year.

1.1.6 Permit to operate:

(a) No person shall operate or cause the operation of a source without applying for and obtaining a permit to operate from the Chairman. Application for a permit to operate a new source shall be made at least 30 days prior to start up of operation.

(b) No person shall operate or cause the operation of an existing source without, within 90 days of the date of adoption of applicable rules and regulations, applying for a permit to operate such source or submitting a control plan for approval in accordance with section 1.6 of these regulations.

(c) No owner or operator shall operate or cause the operation of a source if the Chairman denies or revokes a permit to operate.

1.1.7 Standards for granting permits: No permit to operate shall be granted unless the applicant shows to the satisfaction of the Chairman that the source is in compliance with applicable rules and regulations.

1.1.8 Performance testing: Before a permit to operate is granted, the applicant, if required by the Chairman, shall conduct performance tests in accordance with methods approved by the Chairman. Such tests shall be made at the expense of the applicant. The Chairman may monitor such tests and may also conduct performance tests.

1.1.9 Action on applications:

(a) The Chairman shall act within 60 days after start up on an application for a permit to operate a new source and within 60 days after receipt thereof, on an application to operate an existing source, and shall notify the applicant, in writing, of his approval, conditional approval, or denial of the application.

(b) The Chairman shall set forth in any notice of denial his reasons for denial.

1.1.10 Conditional permit: The Chairman may impose any reasonable conditions upon a permit.

1.1.11 Suspension or revocation of permit:

(a) The Chairman may suspend or revoke a permit to operate for violation of applicable rules and regulations.

(b) Suspension or revocation of a permit to operate shall become final 10 days after service of notice on the holder of the permit.

(c) A permit to operate which has been revoked pursuant to these regulations shall be surrendered forthwith to the Chairman.

1.1.12 Transfer of permit: The holder of a permit may not transfer it without the prior written approval of the Chairman.

1.1.13 Exemptions: Approval to construct or a permit to operate shall not be required for:

(a) The installation or alteration of an air pollutants detector, air pollutants recorder, combustion controller, or combustion shutoff.

(b) Air conditioning or ventilating systems not designed to remove air pollutants generated by or released from equipment.

(c) Fuel burning equipment, other than smoke house generators, which: use gas as a fuel for space heating, air conditioning, or heating water; is used in a private dwelling; has a heat input of not more than 350,000 B.t.u. per hour (88.2 million gm-cal/hr.); or is used for space heating, other than boilers and hot air furnaces.

(d) Mobile internal combustion engines.

(e) Laboratory equipment used exclusively for chemical or physical analyses.

- (f) Other sources of minor significance specified by the Chairman.
- 1.1.14 Possession of approval to construct or modify or a permit to operate shall not relieve any person of the responsibility to comply with applicable emission limitations or other regulations.
- 1.2 Source Monitoring, Record Keeping, and Reporting.
- 1.2.1 The Chairman may require the owner or operator of any air pollutant source to install, use, and maintain such monitoring equipment, sample such emissions, establish and maintain such records, and make such periodic emission reports as the Chairman shall prescribe.
- 1.2.2 Records and reports prescribed by the Chairman shall be recorded, compiled, and submitted on forms furnished by the Chairman.
- 1.3 Sampling and Testing Methods
- 1.3.1 All tests shall be made and the results calculated in accordance with test procedures approved by the Chairman. All tests shall be made under the direction of persons qualified by training and/or experience in the field of air pollution control.
- 1.3.2 The Chairman may conduct tests of emissions of air pollutants from any source. Upon request of the Chairman, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emissions of air pollutants.
- 1.4 Malfunction of Equipment; Reporting
- 1.4.1 In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down equipment shall be reported to the Chairman at least twenty-four (24) hours prior to the planned shutdown. Such prior notice shall include, but is not limited to the following:
- (a) Identification of the specific facility to be taken out of service as well as its location and permit number.
  - (b) The expected length of time that the air pollution control equipment will be out of service.
  - (c) The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period.
  - (d) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period.
  - (e) The reasons that it would be impossible or impractical to shut-down the source operation during the maintenance period.

- 1.4.2 In the event that any emission source, air pollution control equipment or related facility breaks down in such a manner as to cause the emission of air pollutants in violation of applicable rules and regulations, the person responsible for such equipment shall immediately notify the Chairman of such failure or breakdown and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Chairman shall be notified when the condition causing the failure or breakdown has been corrected and the equipment is again in operation.
- 1.5 Prohibition of Air Pollution
- No person shall permit or cause air pollution, as defined in section 1.02 of this part.
- 1.6 Compliance Schedule. Except as otherwise specified, the compliance with the provisions of applicable rules and regulations shall be according to the following time schedule.
- 1.6.1 Existing sources. All existing sources not in compliance with applicable rules and regulations on the date of adoption of such rules and regulations shall be in compliance within six months of the date of adoption unless the owner or person responsible for the operation of the source shall have submitted to the Chairman a control plan and schedule for achieving compliance, such plan and schedule to contain a date on or before which compliance will be attained, and such other information as the Chairman may require. If approved by the Chairman, such date will be the date on which the person shall comply. The Chairman may require persons submitting such a plan to submit subsequent periodic reports on progress in achieving compliance. In no event shall the control plan and schedule prescribe a compliance date later than three years from the date of adoption of applicable rules and regulations.
- 1.7 Circumvention. No person shall install or cause the installation or use of any device or any means which, without resulting in reduction in the total amount of air pollutant emitted, conceals or dilutes an emission of air pollutant which would otherwise violate applicable rules and regulations.
- 1.8 Severability. If any provisions of these regulations or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or application of any other part of these regulations which can be given effect without the invalid provisions or application, and to this end the provisions of these regulations and the various applications thereof are declared to be severable.
- 1.9 Ambient Air Quality Standards
- 1.9.1 The ambient air quality standards for the Territory of American Samoa shall be the same as the National Secondary Air Quality Standards. (See Federal Register dated April 30, 1971 entitled National Primary

and Secondary Ambient Air Quality Standards). These standards are enumerated below:

AMBIENT AIR QUALITY STANDARDS

Pollutant	Yearly Mean, ug/m <sup>3</sup>	Yearly Maximum, ug/m <sup>3</sup>	Time	Other, ug/m <sup>3</sup>
SO <sub>2</sub>	60 (arithmetic) (0.02)	260 (0.1)	24-hours	1300 yearly (0.5) 3 hr. Max. Secondary
Particulate	60 (geometric)	150	24-hours	
CO		10 mg/m (9)	8-hours	
		4 mg/m (35)	1-hour	
Oxidants	-	160 (0.08)	1-hour	
HC	-	160 (0.24)	3-hours (6-9 am)	
NO	100 (arithmetic) (0.05)	-	-	

numbers in parenthesis are ppm equivalents.

1.9.2 These numerical air quality standards are the maximum allowable concentrations of pollutants in the ambient air necessary to protect the health and welfare of the people of American Samoa. No degradation of the quality of the ambient air shall be permitted in areas in which the concentrations of the identified pollutants are lower than the numerical standards established by these regulations unless it has been adequately demonstrated to the Chairman of the Environmental Quality Commission that a degradation of the air quality in an area is justified as a result of necessary economic or social development and that such lowering of air quality will not seriously interfere with or become injurious to any assigned use made thereof.



FINAL

### CONTROL OF OPEN BURNING

2.1

No person shall ignite, cause to be ignited, permit to be ignited or maintain any open fire except as follows:

- (a) Open fires for the cooking of food for human consumption on other than commercial premises;
- (b) Fires for recreational or ceremonial purposes;
- (c) Fires to abate a fire hazard, providing hazard is so declared by the fire department or fire district having jurisdiction;
- (d) Fires for prevention or control of disease or pests;
- (e) Fires for training personnel in the methods of fighting fires in compliance with 3.1.1;
- (f) Fires for the disposal of dangerous materials, where there is no alternate method of disposal and burning is approved in advance by the Chairman.
- (g) Agricultural burning
- (h) Other open burning as deemed necessary by the Chairman.

## CONTROL OF PARTICULATE EMISSIONS

### 3.1 Visible Emissions

#### 3.1.1 Visible emission restrictions for stationary sources.

- (a) No person shall cause or permit the emission of visible air pollutants of a shade or density equal to or darker than that designated as No. 1 on the Ringelmann chart or 20 percent opacity.
- (b) A person may discharge into the atmosphere from any single source of emission, for a period or periods aggregating not more than 3 minutes in any 60 minutes, air pollutants of a shade or density not darker than No. 3 on the Ringelmann chart or 60 percent opacity.

3.1.2 Exceptions for uncombined water. The provision of this regulation shall not apply to any emission which, except for the presence of uncombined water, such as condensed water vapor, would not be in violation of such provisions.

### 3.2 Fugitive Dust

3.2.1 No person shall cause or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

- (a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- (b) Application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;
- (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.
- (d) Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts;
- (e) Conduct of agricultural practices such as tilling of land, application of fertilizers, etc., in such manner as to prevent dust from becoming airborne.
- (f) The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

3.2.2 No person shall cause or permit the discharge of visible emissions beyond the lot line of the property on which the emissions originate.

3.2.3 When air pollutants escape from a building or equipment in such a manner and amount as to cause a nuisance or violate any regulations, the Chairman may order that the building or equipment in which processing, handling, and storage are done be tightly closed and ventilated in such a way that all emissions from the building or equipment are treated to remove or destroy such air pollutants before emission to the open air.

### 3.3 Incineration

3.3.1 No person shall cause or permit the emission of particulate matter from any incinerator, of greater than 50 tons per day charging rate, to exceed 0.10 pounds per 100 pounds of refuse charged nor from any incinerator, of less than 50 tons per day charging rate, to exceed 0.20 pounds per 100 pounds of refuse charged.

3.3.2 Emission tests shall be conducted at a maximum burning capacity of the incinerator.

3.3.3 The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Chairman in accordance with good engineering practices. In cases of conflict, the determination made by the Chairman shall govern.

3.3.4 For the purposes of this regulation, the total of the capacities of all furnaces within one system shall be considered as the incinerator capacity.

### 3.4 Fuel Burning Equipment

3.4.1 No person shall cause or permit the emission, from fuel burning equipment burning solid fuel, or particulate matter in excess of 0.10 pounds per million B.t.u. (0.54 gm/10<sup>6</sup> gm/cal) of heat input.

3.4.2 For purposes of this regulation, the heat input shall be the aggregate heat content of all fuels whose product of combustion pass through a stack or stacks. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

### 3.5 Process Industries - General

3.5.1 No person shall cause or permit the emission of particulate matter in any one hour from any source in excess of the amount shown in Table 1 for the process weight rate allocated to such source.

3.5.3 Process weight per hour is the total weight of all materials introduced into any specific process that may cause any emission of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.

TABLE 1

## PARTICULATE EMISSION ALLOWABLE BASED ON PROCESS WEIGHT

Process Weight Rate Lb/Hr	Rate of Emission Lb/Hr	Process Weight Rate Lb/Hr	Rate of Emission Lb/Hr.
50	.24	3400	5.44
100	.46	3500	5.52
150	.66	3600	5.61
200	.85	3700	5.69
250	1.03	3800	5.77
300	1.20	3900	5.85
350	1.35	4000	5.93
400	1.50	4100	6.01
450	1.63	4200	6.08
500	1.77	4300	6.15
550	1.89	4400	6.22
600	2.01	4500	6.30
650	2.12	4600	6.37
700	2.24	4700	6.45
750	2.34	4800	6.52
800	2.43	4900	6.60
850	2.53	5000	6.67
900	2.62	5500	7.03
950	2.72	6000	7.37
1000	2.80	6500	7.71
1100	2.97	7000	8.05
1200	3.12	7500	8.39
1300	3.26	8000	8.71
1400	3.40	8500	9.03
1500	3.54	9000	9.36
1600	3.66	9500	9.67
1700	3.79	10000	10.00
1800	3.91	11000	10.63
1900	4.03	12000	11.28
2000	4.14	13000	11.89
2100	4.24	14000	12.50
2200	4.34	15000	13.13
2300	4.44	16000	13.74
2400	4.55	17000	14.36
2500	4.64	18000	14.97
2600	4.74	19000	15.58
2700	4.84	20000	16.19
2800	4.92	30000	22.22
2900	5.02	40000	28.30
3000	5.10	50000	34.30
3100	5.18	60000	40.00
3200	5.27		
3300	5.36		

Interpolation of the data in this table for process weight rates in excess of 60,000 lb/hr shall be accomplished by use of equation  $E = 55p^{0.11} - 40$ , where  $E$  = rate of emission in lb/hr. and  $p$  = process weight rate in tons/hr.

For a cyclical or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be derived by dividing the process weight for a typical period of time.

- 3.5.4 Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this regulation, the interpretation that results in the minimum value for allowable emission shall apply.
- 3.5.5 For purposes of the regulation, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.
- 3.6 Sampling methods
- 3.6.1 The emission limitations set forth in 3.3, 3.4, and 3.5 are based on Source Test Method 5 - "Determination of Particulate Emissions from Stationary Sources" published in the December 23, 1971 Federal Register, page 24888 by the Environmental Protection Agency.

#### CONTROL OF SULFUR COMPOUND EMISSIONS

- 4.1 Fuel Combustion
  - 4.1.1 No person shall burn, sell, or make available for sale for burning in fuel burning equipment, any fuel containing in excess of 3.5 percent sulfur by weight.